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About littoral macrozoobenthos communities of Cheboksary reservoir

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Abstract

This work analyzed the qualitative and quantitative characteristics of zoobenthos communities of coastal shallow zone at Cheboksary reservoir during the vegetation period of 2014. In this regard, three sampling stations were provided, differing by soil, biotic and abiotic environmental conditions. Each station consists of two sections of reservoir shallow coastal area, where the research was performed: directly in the water line area, as well as at various depths of shallow water. The species composition of macrozoobenthos, the number and biomass indicators, the leading groups and organism taxa were specified. 41 taxa of aquatic invertebrates were revealed, 17 of which (41.5% of the total amount) occurred in the water line area and in littoral zone. The observed taxa belong to Mollusca, Arthropoda, Plathelminthes, Annelida types. The greatest species diversity was observed among insects (mainly Diptera representatives), as well as among mollusks. The high amount and biomass indices were observed among gastropods and bivalves, the invasive species Lithoglyphus naticoides (Pfeiffer, 1828), Dreissena polymorpha (Pallas, 1771), which play an important role in the communities of zoobenthos of the Volga-Kama reservoir system. High biomass indices were observed among gastropods, especially Viviparus viviparus (L., 1758). The water edge zone with high levels of biomass had a large amount of pond snails Lymnaea auricularia (L., 1758) and L. stagnalis (L., 1758) and the shallow water zone had a large amount of Unio longirostris (Rossmaessler, 1836) bivalves.

Keywords

Cheboksary water basin, Coastal-shallow area, Littoral, Zoobenthos